

Title (en)

FILE VERIFICATION METHOD, FILE VERIFICATION SYSTEM AND FILE VERIFICATION SERVER

Title (de)

DATEIVERIFIKATIONSVERFAHREN, DATEIVERIFIKATIONSSYSTEM UND DATEIVERIFIKATIONSSERVER

Title (fr)

PROCÉDÉ, SYSTÈME ET SERVEUR DE VÉRIFICATION DE FICHIERS

Publication

**EP 3739493 B1 20230125 (EN)**

Application

**EP 19194749 A 20190830**

Priority

TW 108116661 A 20190515

Abstract (en)

[origin: EP3739493A1] A file verification method, a file verification system and a file verification server are provided. The file verification method includes the following steps. A tree data structure is established according to a plurality of first hash values of a plurality of first electronic files. A first root hash value of the tree data structure is stored into a block of a blockchain. A verification data including block information of the block, one of the first hash values and at least one non-terminal hash value of the tree data structure is generated for one of the first electronic files. A second electronic file is verified according to the verification data.

IPC 8 full level

**G06F 21/64** (2006.01); **H04L 9/32** (2006.01)

CPC (source: EP US)

**G06F 16/9027** (2018.12 - US); **G06F 21/602** (2013.01 - EP); **G06F 21/64** (2013.01 - US); **H04L 9/0637** (2013.01 - US);  
**H04L 9/0643** (2013.01 - US); **H04L 9/3239** (2013.01 - EP); **H04L 9/50** (2022.05 - EP); **G06F 2221/2145** (2013.01 - EP); **H04L 9/50** (2022.05 - US)

Citation (examination)

ANONYMOUS: "Merkle tree formation with odd number of leaves - Cryptography - Ethereum Research", 25 July 2018 (2018-07-25), pages 1 - 3, XP055909500, Retrieved from the Internet <URL:<https://ethresear.ch/t/merkle-tree-formation-with-odd-number-of-leaves/2681/3>> [retrieved on 20220405]

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

**EP 3739493 A1 20201118; EP 3739493 B1 20230125;** TW 202044086 A 20201201; TW I715036 B 20210101; US 11361110 B2 20220614;  
US 2020364373 A1 20201119

DOCDB simple family (application)

**EP 19194749 A 20190830;** TW 108116661 A 20190515; US 201916543644 A 20190819